

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A system for driving a pump in a turboengine, said system comprising:

an electric motor including a stator and a rotor, and;

an air turbine including a casing and a rotary assembly; said air turbine being suitable for being fed by a flow of air taken from a compressor of said turboengine in order to contribute to driving said pump,

wherein the air turbine lies on a same axis as said electric motor, and

wherein the stator of said electric motor is integrated in the casing of said air turbine, and the rotor of said electric motor is integrated in the rotary assembly of the air turbine.

Claim 2 (Previously Presented): A system according to claim 1, further comprising a control valve for controlling the flow of air taken from the compressor, which control valve is in a closed position while the turboengine is starting and in an open position once said turboengine has started.

Claim 3 (Original): A system according to claim 1, wherein the flow of air taken from the compressor is sufficient to enable the pump to be operated by the air turbine in the absence of electrical power supply or in the event of said electric motor failing.

Claims 4-5 (Canceled).

Claim 6 (Previously Presented): A system according to claim 1, wherein the rotor of the electric motor is mounted on a wall of the rotary assembly, and the stator is mounted on a wall of the casing.

Claim 7 (Previously Presented): A system according to claim 6, wherein the rotary assembly includes a shaft mechanically coupled to the pump and supported by bearings interposed between said shaft and the casing.

Claim 8 (Previously Presented): A system according to claim 7, wherein the air turbine is an axial-centripetal air turbine, and the rotary assembly includes a wheel at a free end of the shaft, axial-centripetal blades extending from the periphery of the wheel.

Claim 9 (Previously Presented): A system according to claim 8, wherein air stream passages between the blades are outwardly defined by a wall secured to ends of the blades and axially extended in an air flow direction by a cylindrical sleeve around which the rotor of the electric motor is mounted.

Claim 10 (Previously Presented): A system according to claim 8, wherein the wheel includes a cylindrical sleeve at radially outer ends of the blades, which sleeve extends axially in a direction opposite to an air flow direction, and is disposed in an axial housing formed in the casing around the bearings, and the rotor of the electric motor is mounted inside said sleeve.

Claim 11 (Previously Presented): A system according to claim 7, wherein the air turbine is an axial air turbine and comprises at least one ring of stationary blades extending

radially inwards from the casing, and a ring of moving blades extending radially outwards from a drum secured to the shaft, the rotor of the electric motor being mounted inside said drum and the stator being mounted around a cylindrical sleeve connected to the casing by structural arms.

Claim 12 (Previously Presented): A system according to claim 7, wherein the air turbine is an axial air turbine and has a ring of nozzle blades and a ring of moving blades provided at the periphery of a wheel which extends radially from a middle zone of the shaft, said shaft being supported at each of its ends by a respective bearing, an air flow stream being defined downstream from the ring of moving blades by two shrouds forming a support structure for one of the bearings, and the rotor of the electric motor is mounted on a face of said wheel, an airgap of said electric motor lying in a radial plane.

Claim 13 (Previously Presented): A system according to claim 12, comprising a second electric motor with a rotor mounted on another face of the wheel.

Claim 14 (Previously Presented): A system according to claim 1, wherein the turboengine is an "all-electric" aeroengine.

Claim 15 (Original): A system according to claim 1, wherein the pump is a gear pump and together with said system constitutes a complete module that is ready for mounting and easy to replace.

Claim 16 (Previously Presented): A system according to claim 1, wherein the pump is a gear pump.

Claim 17 (Previously Presented): A system according to claim 1, wherein the pump is a fuel pump.

Claim 18 (Previously Presented): A system according to claim 1, wherein the pump is an oil pump.

Claim 19 (Previously Presented): A system according to claim 1, further comprising said turboengine with said compressor and said pump.

Claim 20 (Previously Presented): A system according to claim 19, wherein said electric motor is configured to drive said pump.

Claim 21 (Currently Amended): A system for driving a pump in a turboengine, said system comprising:

a turboengine with a compressor and a pump;

an electric motor including a stator and a rotor, wherein said electric motor is configured to drive said pump, and;

an air turbine including a casing and a rotary assembly; said air turbine being configured to receive a flow of air from said compressor of said turboengine and being configured to contribute to driving said pump, and

wherein the stator of said electric motor is located in the casing of said air turbine,  
wherein the rotor of said electric motor is located in the rotary assembly of said air turbine.

Claim 22 (Cancelled).

Claim 23 (Previously Presented): A system according to claim 21, wherein the air turbine lies on a same axis as said electric motor.

Claim 24 (Previously Presented): A system according to claim 21, further comprising a control valve configured to control the flow of air from the compressor, said control valve being in a closed position when the turboengine is starting and in an open position after said turboengine has started.

Claims 25-27 (Cancelled).